

**Exhibit A**

**Clean Version of The Pending Claims in U.S. Patent Application Ser. No. 09/975,308**

1. (Amended) An isolated expression vector comprising the nucleotide sequence of SEQ ID NO:8.
2. (Amended) An isolated expression vector comprising a nucleic acid sequence encoding the amino acid sequence of SEQ ID NO:9.
3. (New) A host cell comprising the recombinant expression vector of claim 1 or 2.

BD144530 ACCESSION:BD144530 NID: gi 27850288 dbj BD144530.1 Novel  
G-protein coupled receptors  
Length = 924

Score = 617 bits (1574), Expect = e-174  
Identities = 305/307 (99%), Positives = 307/307 (99%)  
Frame = +1

Query: 1 MNHSVVTEFIILGLTKKPELQGIIFFLLIVYLVAFLGNMLIIIAKIYSNTLHTPMYVFL 60  
MNHSVVTEFIILGLTKKPELQGIIFFLLIVYLVAFLGNMLIIIAKIY+NTLHTPMYVFL  
Sbjct: 1 MNHSVVTEFIILGLTKKPELQGIIFFLLIVYLVAFLGNMLIIIAKIYNNLHTPMYVFL 180

Query: 61 LTLAVVDIICTTSIIPKMLGTMLTSENTISYAGCMSQLFLFTWSLGAEMVLFTTMAYDRY 120  
LTLAVVDIICTTSIIPKMLGTMLTSENTISYAGCMSQLFLFTWSLGAEMVLFTTMAYDRY  
Sbjct: 181 LTLAVVDIICTTSIIPKMLGTMLTSENTISYAGCMSQLFLFTWSLGAEMVLFTTMAYDRY 360

Query: 121 VAICFPLHYSTIMNHHMCVALLSMVMAIAVTNSWVHTALIMRLTFCGPNTIDHFFCEIPP 180  
VAICFPLHYST+MNHHMCVALLSMVMAIAVTNSWVHTALIMRLTFCGPNTIDHFFCEIPP  
Sbjct: 361 VAICFPLHYSTVMNHHMCVALLSMVMAIAVTNSWVHTALIMRLTFCGPNTIDHFFCEIPP 540

Query: 181 LLALSCSPVRINEVMVYVADITLAIGDFILTCISYGFIIIVAILRIRTVEGKRKAFSTCSS 240  
LLALSCSPVRINEVMVYVADITLAIGDFILTCISYGFIIIVAILRIRTVEGKRKAFSTCSS  
Sbjct: 541 LLALSCSPVRINEVMVYVADITLAIGDFILTCISYGFIIIVAILRIRTVEGKRKAFSTCSS 720

Query: 241 HLTVVTLYYSPVIYTYIRPASSYTFERDKVVAALYTLVPTLNPMVYSFQNREMQAGIRK 300  
HLTVVTLYYSPVIYTYIRPASSYTFERDKVVAALYTLVPTLNPMVYSFQNREMQAGIRK  
Sbjct: 721 HLTVVTLYYSPVIYTYIRPASSYTFERDKVVAALYTLVPTLNPMVYSFQNREMQAGIRK 900

Query: 301 VFAFLKH 307  
VFAFLKH  
Sbjct: 901 VFAFLKH 921



5'-GCTCTGCGAT-3' (top) and 3'-TCTGCTAGAG-5' (bottom) are the sequences of the two DNA fragments. The nucleotide sequence of the top fragment is 5'-GCTCTGCGAT-3' and the sequence of the bottom fragment is 3'-TCTGCTAGAG-5'. The nucleotide sequence of the top fragment is 5'-GCTCTGCGAT-3' and the sequence of the bottom fragment is 3'-TCTGCTAGAG-5'.

PubMed

Nucleotide

Protein

## Genome

## Structure

PMG

### Taxonomy

OMIM

Boo

Search  for

### Limits

[Preview/Index](#)

## History

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## Details

## Display

default

**Show:**

20

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File

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□ 1: BD144530. Novel G-protein c...[gi:27850288]

## Links

LOCUS	BD144530	924 bp	DNA	linear	PAT 17-JAN-2003
DEFINITION	Novel G-protein coupled receptors.				
ACCESSION	BD144530				
VERSION	BD144530.1 GI:27850288				
KEYWORDS	JP 2002112793-A/255.				
SOURCE	Homo sapiens (human)				
ORGANISM	<u>Homo sapiens</u> Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.				
REFERENCE	1 (bases 1 to 924)				
AUTHORS	Haga,T., Takeda,S. and Miyake,N.				
TITLE	Novel G-protein coupled receptors				
JOURNAL	Patent: JP 2002112793-A 255 16-APR-2002; JAPAN SCIENCE AND TECHNOLOGY CORP				
COMMENT	OS Homo sapiens (human) PN JP 2002112793-A/255 PD 16-APR-2002 PF 09-FEB-2001 JP 2001034434 PI TATSUYA HAGA,SHIGEKI TAKEDA,NARIKI MIYAKE PC C12N15/09,A01K67/027,A61K38/00,A61K39/395,A61K39/395,A61K45/00, PC A61K48/00, PC A61P43/00,C07K14/705,C07K16/28,C07K19/00,C12N1/15,C12N1/19, PC C12N1/21, PC C12N5/10,C12Q1/02,C12Q1/68,G01N33/15,G01N33/50,G01N33/53, PC G01N33/566// PC C12P21/08,C12N15/00,A61K37/02,C12N5/00 CC Novel G-protein coupled receptors FH Key Location/Qualifiers FT CDS (1)..(924).				

FEATURES	Location/Qualifiers
source	1..924 /organism="Homo sapiens" /db_xref="taxon:9606"

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121	ctcatcatca	ttgccaaaat	ctataacaac	accttgcata	cgcccatgta	tgttttctct
181	ctgacactgg	ctgttggtga	catcatctgc	acaacaagca	tcataccgaa	gatgctgggg
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901 gtgtttgcat ttctgaaaca ctag

//

Revised: July 5, 2002.

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Feb 19 2003 14:49:48

Query= SEQ ID NO:8  
 (924 letters)

Sequences producing significant alignments:		Score (bits)	E Value
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Query: 61	caggggaattatcttcctcttttttctcattgtctatcttgtggcttttctcggcaacatg	120	
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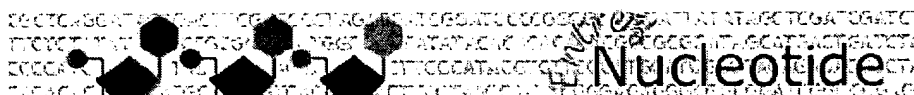
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Sbjct: 154913 gtgtttgcatttctgaaacactag 154890



PubMed

Nucleotide

Protein

Genome

Structure

PMC

Taxonomy

OMIM

Boo

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☐ 1: AC091612. Homo sapiens chro...[gi:18497169]

Links

LOCUS AC091612 180657 bp DNA linear HTG 05-FEB-2002  
 DEFINITION Homo sapiens chromosome 1 clone RP11-656022, WORKING DRAFT  
 SEQUENCE, 1 unordered piece.  
 ACCESSION AC091612 AL390860  
 VERSION AC091612.4 GI:18497169  
 KEYWORDS HTG; HTGS\_PHASE1; HTGS\_DRAFT; HTGS\_FULLTOP.  
 SOURCE Homo sapiens (human)  
 ORGANISM Homo sapiens  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
 REFERENCE 1 (bases 1 to 180657)  
 AUTHORS Kaul,R.K., Olson,M.V., Raymond,C. and Haugen,E.D.  
 TITLE Direct Submission  
 JOURNAL Unpublished  
 REFERENCE 2 (bases 1 to 180657)  
 AUTHORS Kaul,R.K., Olson,M.V., Raymond,C., Clendenning,J., Ivey,R.G. and  
 Haugen,E.D.  
 TITLE Direct Submission  
 JOURNAL Submitted (09-MAY-2001) Genome Center, University of Washington,  
 Box 352145, Seattle, WA 98195, USA  
 COMMENT On Feb 5, 2002 this sequence version replaced gi:15487406.  
 ----- Genome Center  
 Center: University of Washington Genome Center  
 Center Code: UWGC  
 Web site: <http://www.genome.washington.edu>  
 Contact: uwgchtgs@u.washington.edu  
 Drafting Center: SC  
 ----- Project Information  
 Center project name: chr-1  
 Center clone name: RP11-656022 (sc0182)  
 ----- Summary Statistics  
 Sequencing vector: plasmid; L08752; 100% of reads  
 Chemistry: Dye-terminator Big Dye; 100% of reads  
 Assembly program: Phrap; version 0.990319  
 Consensus quality: 180536 bases at least Q40  
 Consensus quality: 180650 bases at least Q30  
 Consensus quality: 180657 bases at least Q20  
 Insert size: 194815; 11.0% error; agarose-fp  
 Insert size: 180657; sum-of-contigs  
 Quality coverage: 8.4x in Q20 bases; agarose-fp  
 Quality coverage: 9.0x in Q20 bases; sum-of-contigs  
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 \* NOTE: This is a 'working draft' sequence. It currently  
 \* consists of 1 contigs. The true order of the pieces  
 \* is not known and their order in this sequence record is  
 \* arbitrary. Gaps between the contigs are represented as  
 \* runs of N, but the exact sizes of the gaps are unknown.